PART 2. Strategies to enhance the form and pattern of development for optimal use of the transportation system

2.1 Diversify allowed land uses

(Important companion strategy: 1.1 Contain development within limited growth area boundaries)

Objective: To enable a single auto trip to serve two or more purposes without additional auto travel.

Description: Diversity of land uses is one of the "D"s that brings transportation and land use into sync with each other by increasing choice of transportation. The appropriate mix of land uses depends on whether you are talking about a downtown, neighborhood, business park, or suburban shopping center. But in all cases, you should strive, within well-defined growth areas, to have a variety of compatible uses within ¼- to ½-mile of each other, as measured along vehicular or pedestrian pathways.

Downtowns are natural land use mixing areas, with a complement of retail, office, civic, and cultural uses. A fully diverse downtown allows residential uses at densities that include multifamily residential uses on upper floors and compact residential streets adjacent to it. In the case of a hamlet or similar rural settlement, a complement of residential uses may already exist within a ½-mile radius. Within this radius, zoning and subdivision standards should allow for easy "infill" of both non-residential and residential lots on vacant parcels to increase densities.

Zoning ordinances should require business and industrial parks to set aside at least 5%-10% of their space for limited retail activity, such as restaurants, financial services, and personal services, that serve the tenants of the parks. Where public sewer is available, multifamily residential uses also can be at the periphery of office parks, with potential for some workers to be located there and to add support to the retail and personal service businesses.

Similarly, suburban shopping centers should comprise not only the expected retail uses, but also office uses and personal service businesses located either within the centers or within ¼-mile of their front doors via shared driveways and internal circulation pathways. Zoning ordinances should require that centers of more than 25,000 square feet provide space for such uses.

PART 2. Strategies to enhance the form and pattern of development for optimal use of the transportation system

2.2 Locate residences and uses needed by neighborhood residents, such as elementary schools and stores with convenience goods and services, close to each other

(Important companion strategy: 1.1 Contain development within limited growth area boundaries)

Objective: To provide residents with easy access to day-to-day services without undue burdens on collector and arterial roads.

Description: In residential areas, diversity of land use can be measured by the number of stores and services providing everyday needs that are located within ½-mile of most homes in a neighborhood. Typical, compatible uses include, for example, schools, places of worship, day care centers, small restaurants (no drive-through windows), banks, convenience food stores, local hardware stores, other retail stores of less than 5,000 square feet, hair salons, and small-scale professional and doctor's offices of less than 2,500 square feet.

Typically we think of incorporating small-scale activity into or near an existing residential area. However, it works in the converse, too: if, for example, a school has been recently built in an outlying area of town, seriously consider whether homes can be consciously programmed to locate in the same vicinity, with good connections to the school.

Locating homes and neighborhood uses and facilities close to each other can be accommodated through zoning ordinances in several ways:

- Some uses can be allowed as conditional uses within the residential zoning district because they are basically compatible with residential uses.
- All of the uses can be allowed in a Neighborhood Business District embedded within or adjacent to the residential district. These districts are geographically small, often no more than a few acres. They should be considered immune from concern about illegal "spot zoning" (a frequent worry about very small zoning districts), because they are meeting a public need.
- Finally, municipalities can use contract or conditional zoning as a tool to provide pre-planned non-residential or mixed use development within or adjacent to a residential zoning district. This requires close consultation with the residential neighborhood.

In all cases, a non-residential use involving expansion or new construction should be subject to site plan review to assure proper arrangements for parking, drainage, lighting, and similar components of the site.

PART 2. Strategies to enhance the form and pattern of development for optimal use of the transportation system

2.3 Increase density of development to expand economic and transportation opportunities

(Important companion strategy: 1.1 Contain development within limited growth area boundaries)

Objective: To achieve densities that can support choice in transportation and allow efficient economic growth.

Description: In most communities, only incremental increases in residential and commercial densities of development within identified growth areas are needed to make a difference in how people use the transportation system. Strive for the following minimum densities (which, in keeping with Maine's small town environment, are still considered low to moderate):

- Residential, on-site sewer and water: One unit per 20,000 to 30,000 square feet (1.75 to 2 units per residential acre), the maximum allowed by the State's Minimum Lot Size Law, in areas within ½-mile of town centers; combine this density with frontage requirements of no more than 100 feet to maintain a scale of walkability. (Also see the related strategy on decentralized community sanitary districts.)

- Residential, off-site sewer: 4 units per residential acre in single-family areas within ½-mile of town centers and 8 units per residential acre in areas that allow multi-family housing. These densities, with proper design and street interconnections, are highly walkable and increase the feasibility of transit service.

- Commercial, downtowns: A floor area ratio (F.A.R.) of at least 0.7, or 700 square feet of total floor area in buildings per 1,000 square feet of lot area, including space for parking lots. Many small city downtowns (such as Bath and Rockland) are in the range of 0.6 to 0.8. For reference, large downtowns, where bus service is more common, have a F.A.R. of over 1.5. Portland downtown's F.A.R. is more than 2.0. See Figure 3-2 in Chapter 3.

- Commercial, suburban centers: A floor area ratio of at least 0.4. This is more than twice the typical F.A.R. of most suburban shopping centers, where single-story buildings and expansive parking lots push the F.A.R. down to less than 0.2.

Communities can influence floor area ratios by keeping off-street parking requirements in check, and setting a maximum as well as a minimum number of parking spaces in highway commercial districts. In most downtowns, no or a minimal off-street parking requirement is appropriate. A combination of on-street parking and small public lots both serves merchants well and fosters higher FARs. In highway commercial districts, consider establishing a maximum at 80% of peak parking demand.

PART 2. Strategies to enhance the form and pattern of development for optimal use of the transportation system

2.4 Create a decentralized community sanitary district for subsurface wastewater disposal

Objective: To enable areas without public sewer to develop in a compact pattern, as encouraged by the Growth Management Act and the STPA.

Description: Maine law (Title 38, Section 1234) allows municipalities to create community sanitary districts – which is a smaller, limited version of regular sanitary districts – for the purpose of providing subsurface wastewater collection and treatment services to accommodate residential development. This tool was established in 2005 to make it easier for towns without centralized wastewater collection and treatment capacity to implement relatively compact growth areas. Engineered community subsurface wastewater systems are very reliable if properly designed, installed and maintained – tasks which become the responsibility of a community sanitary district.

This tool allows homes to be located on individual lots smaller than 20,000 square feet, using a community subsurface filter bed or system of beds that is professionally maintained by the community sanitary district. The system can be installed and financed by a developer at the time of development, or in advance by the district. The district, like any sanitary district, charges an annual user fee to maintain the system in good working order. The overall density of development in the area still cannot be more than 1 unit per 20,000 square feet, but because the leach field is located away from the lots and wells, the lots themselves can be smaller and the development pattern more compact and walkable.

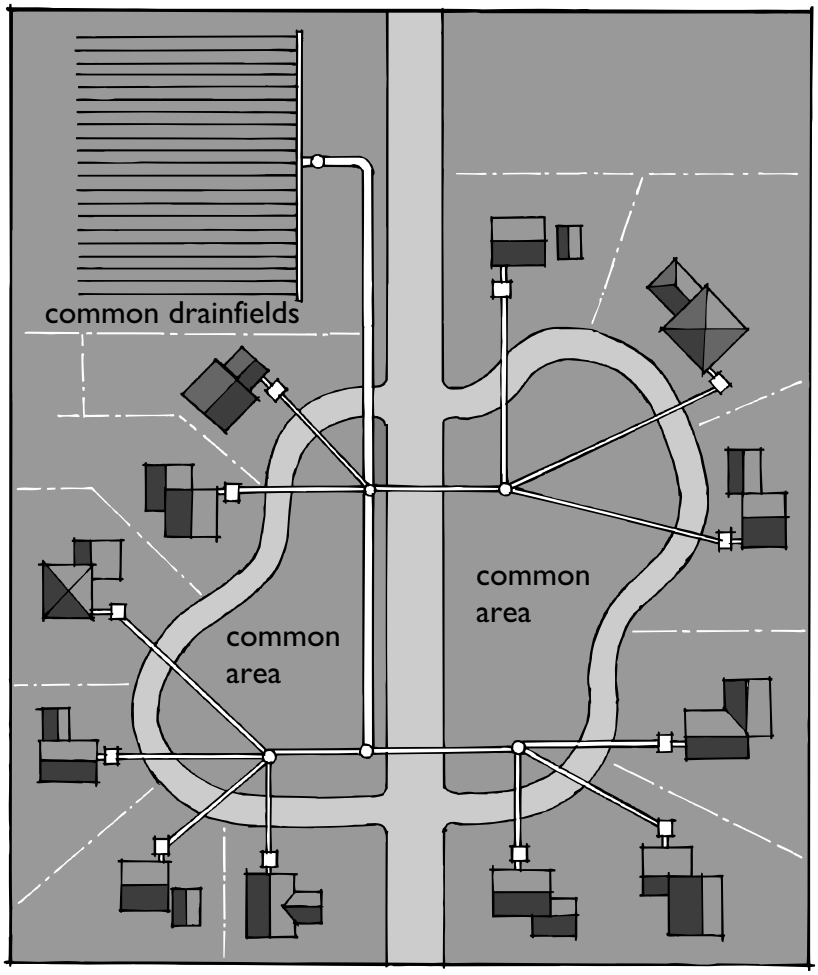

Figure B-4. Engineered community septic system

An engineered community septic system can enable a neighborhood development in the absence of a public, off-site sewer system. State law enables creation of a simplified community sanitary district for long-term maintenance of the system, funded through user fees.

This approach is especially suited for use in communities that already have a sanitary district but whose public sewer system serves only a limited area. The sanitary district itself can oversee the development and assume responsibility for maintaining the community subsurface system, administering the system in the same way as it administers the regular public sewer system.

PART 2. Strategies to enhance the form and pattern of development for optimal use of the transportation system

2.5 Prepare and adopt an "official map" of streets and other planned public improvements

Objective: To plan for an interconnected street, utility, and open space system within designated growth areas, or portions of growth areas, in a community.

Description: An "official map" is a map that gives notice to private landowners of where future streets and other public improvements, such as parks, playgrounds, and sewer lines, are to be located. It is usually adopted as part of a comprehensive plan. While there is no geographic limit on its use, it is best used within designated growth areas or part of a growth area where there is active interest in development.

An "official map" is best prepared in conjunction with groups of landowners with contiguous holdings. It creates several advantages for the landowners and the Town alike:

- It lets both landowners and the Town know where street and utility (and potentially open space) systems should interconnect as development occurs independently on individual lots;
- It streamlines the future subdivision review process for landowners proposing streets and utilities consistent with the official map;
- It helps to assure that individual structures built prior to a subdivision process are not inadvertently placed within the potential future rights-of-way; and
- It can be a strong tool to implement the pattern of development envisioned in a comprehensive plan.

The official map needs to be prepared with reasonable (i.e., medium-intensity) analysis of wetlands and other restrictions to development. This information is largely available from governmental sources, such as the Office of Geographic Information Systems and the State Planning Office. However, site-level analysis is advisable at the points where proposed streets will meet at property lines to assure that the conditions are suitable for the planned connecting points. The more expensive site-level analysis otherwise can await the actual subdivision or site plan review process and be built into the developer's design work.

PART 2. Strategies to enhance the form and pattern of development for optimal use of the transportation system

2.6 Modify supply, location, and use of public parking in village centers and downtowns

Objective:

- To serve the needs of motorists in terms of adequate mobility and accessibility for all motorist destinations
- To serve the needs of area businesses in providing adequate accessibility for their customers (whether they stop for impulse shopping or for planned purchases)
- To serve the needs of area and regional businesses in providing adequate mobility and accessibility for the delivery of goods via truck and
- To serve, if desired for on-street parking, as a buffer between moving traffic and pedestrians on sidewalks.

Description: Each of these interests must be understood, respected in the planning process, and reflected in any improvement proposals. Also, each parked vehicle represents one or more persons who are pedestrians, walking between the parked vehicle and one or more destinations.

With respect to **on-street parking,**

- Protect the capacity for on-street parking, identifying acceptable "infill" spaces along side streets as necessary
- Accept the need for good snow removal strategies as part of the operating necessity of a viable downtown
- Keep speed limits at less than 30 mph so that on-street parking can be safely retained
- Institute time limits along high value frontages
- Designate spaces/areas that should only be used for short-term parking
- Designate spaces/areas that should only be used for curbside loading
- Provide at least 7 feet of street width for parallel parking
- Evaluate whether truck deliveries from the street at the front of buildings should be limited to off-hour periods

With respect to **off-street parking,**

- Especially where the village or downtown is compact and walkable, or if there is bus service, preserve flexibility in off-street parking requirements, favoring, wherever conditions allow, no or limited off-street parking standard for downtown uses
- Place off-street parking principally to rear of buildings, so that buildings can be uniformly pulled to the fronts of their lots; or single-loaded along sides of buildings so that buildings are not pushed overly far apart from each other

PART 2. Strategies to enhance the form and pattern of development for optimal use of the transportation system

- Encourage employees and long-term parkers to park in an off-street lot
- Improve landscaping, stall markings, and lighting within parking lots
- Improve sidewalks/pathways between parking lots and destinations
- Improve signage to parking facilities

PART 2. Strategies to enhance the form and pattern of development for optimal use of the transportation system

2.7 Evaluate and consider standards for single-parcel off-street parking

Objective:

- To serve the needs of motorists in terms of adequate mobility and accessibility;
- To provide adequate mobility and accessibility for the delivery of goods via truck;
- provide for safe and efficient movement for pedestrians within the parking lot; and
- To minimize, where possible, the amount of pavement, which reduces compactness and increases storm water runoff, for parking

Description: Potential means of accomplishing these objectives include:

- Update current parking standards, which likely are aimed at infrequent annual peak periods. Consider setting the minimum standard for an average period rather than the seasonal peak. If alternative forms of transportation are available, or if more than one activity can easily share parking areas, consider setting a maximum parking standard for activities with seasonal peaks (such as allowing no more than 80% of parking needed during the seasonal peak)

- Allow parking requirements to be met by sharing off-street parking facilities between uses with different peak parking times. In new commercial subdivisions, establish a standard that requires shared parking between lots unless good reason can be shown that a separate parking area is necessary.

- Ensure site design provides appropriate on-site circulation to prevent entering vehicles from queuing into the street, and to ensure safe pedestrian pathways between parking lot and building and between commercial buildings on adjacent sites

- Design access points to operate safely and efficiently

- Provide appropriate landscaping, stall markings, and lighting within parking lots **(see 5.5 Adopt performance standards for highway-oriented development)**

PART 2. Strategies to enhance the form and pattern of development for optimal use of the transportation system

2.8 Locate public buildings to meet LEED siting criteria

Objective: To site public buildings in locations that easily connect to other common services in village centers, downtowns or neighborhoods.

Description: LEED is the Leadership in Energy and Environmental Design Green Building Rating System. The U.S. Green Building Council created this voluntary, national rating system in 1998 to promote high-performance, sustainable buildings. To earn LEED certification, a building project must earn "credits" by meeting performance benchmarks in five areas: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. Within the category of sustainable site development, credits can be earned for "development density and community connectivity."

These credits are earned by either:

- constructing or renovating a building on a previously developed site and within an area with a minimum density of 60,000 sq. ft. per acre (equal to a floor area ratio of about 1.4), OR
- constructing or renovating a building on a previously developed site and within ½ mile of a residential zone or neighborhood with an average density of 10 units per acre (net of streets) and within ½ mile of at least 10 "basic services."

Basic services include banks, places of worship, convenience groceries, day care centers, cleaners, fire stations, beauty shops, hardware stores, laundries, libraries, medical or dental offices, senior care facilities, parks, pharmacies, post offices, restaurants, schools, supermarkets, theaters, community centers, fitness centers, and museums.

Orono Public Library

Community leaders in Orono and their architectural design team located the Town's new Public Library to earn certification under LEED. The site is next door to the Town's senior and community center on a previously developed site, near compact housing development, and within ¼-mile of the Bangor Area Transit (BAT) bus route and close to local schools and a variety of services.